UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

MICHAEL PHILIP KAUFMAN,

Plaintiff,

v.

MONDAY.COM LTD.,

Defendant.

Civil Action No. 23-cv-5864 (JMF)

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

JURY TRIAL DEMANDED

Plaintiff MICHAEL PHILIP KAUFMAN ("Plaintiff"), as and for his first amended complaint against the defendant, Monday.com Ltd. ("Monday.com"), alleges as follows:

NATURE OF THE ACTION

1.   This is an action against Monday.com for patent infringement. The patents asserted herein concern technology for automatically generating a user interface to work with the data in a relational database and related systems and methods. Plaintiff alleges herein that Monday.com's online data-driven services (the "Services," as further defined herein), during the period July 2017 to February 2023, infringed the Asserted Patents (as such term is defined herein). Monday.com has admitted that its systems do in fact carry out the functionality claimed in the Asserted Patents. *See* D.I. 26-1 ("*the claimed functionality* occurs on the browser side" of Monday.com's system). Thus, as confirmed by its own statement herein, Monday.com, which creates and provides the browser-side software that implements the patented functionality, infringes at least the computer-readable media claims of the Asserted Patents by making and using such software on its systems.

THE PARTIES

2. Plaintiff is an individual who resides in this District.

3. Upon information and belief, Monday.com is a corporation organized under the laws of Israel with its principal place of business at 6 Yitzhak Sadeh Street, Tel Aviv, Israel.

JURISDICTION AND VENUE

Subject Matter Jurisdiction

4. This action is for patent infringement and arises under 35 U.S.C. § 271 *et seq.* This Court has subject matter jurisdiction thereof pursuant to 28 U.S.C. §§ 1331, 1338(a) and 1367.

Personal Jurisdiction

5. This Court has personal jurisdiction over Monday.com under 28 U.S.C. § 1694, Rule 4(k)(1)(A) & (C), Fed. R. Civ. P., and the laws of the State of New York, including New York C.P.L.R. §§ 301, 302(a)(1)-(4), and consistent with the Due Process Clause of the United States Constitution. As set out below, Monday.com has sufficient minimum contacts with the forum because Monday.com transacts substantial business in the State of New York and in this District. Since 2018, Monday.com has its North American headquarters at 225 Park Avenue South, New York, New York 10003, a regular and established place of business in this District at which Monday.com has agents conducting business. Through those agents in this District, Monday.com is regularly engaged in carrying on a substantial part of its ordinary business on a permanent basis from at least its offices within the District, over which activity Monday.com exercises a substantial measure of control. Monday.com has committed acts of infringement in this District through its employees making, using, offering to sell, and/or selling the patented invention of the Asserted Patents, as further outlined below. Further, Monday.com was recently

selected for the 2023 Fortune "Best Workplaces in New York" list. Monday.com has also

purposely availed itself of the forum in New York through, among other activities, a recent

advertising campaign in the New York City subway system.

Venue

6.   Venue is proper in this judicial District pursuant to 28 U.S.C. §§ 1391, 1400(b),

for any one or more of the reasons that Monday.com is an alien, is subject to personal

jurisdiction in this District, has committed acts of infringement in this District and has a regular

and established place of business in this District as alleged in paragraph 5.

STATEMENT OF FACTS

7.   Unless otherwise specified, the factual assertions set forth herein relate to the

facts that existed during the period from the beginning of the limitations period (July 2017) to the

last to expire of the Asserted Patents (February 2023).

The Asserted Patents

8.   Plaintiff is the first named inventor and assignee of the entire interest of U.S.

Patent No. 7,885,981[1] (the "'981 patent"), U.S. Patent No. 10,977,220[2] (the "'220 patent"), and

10,025,801[3] (the "'801 patent") (the foregoing being collectively referred to herein as the

"Asserted Patents"). Each of the Asserted Patents is incorporated herein by reference.

9.   A substantial portion of data processing involves data kept in the form of

relational databases. Relational databases comprise arbitrarily large and complexly structured

collections of data, in which the structure is designed to support and facilitate advanced

operations used throughout business, scientific, and other applications, such as search, retrieval,

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[1] Attached hereto as Exhibit A.
[2] Attached hereto as Exhibit B.
[3] Attached hereto as Exhibit C.

joining of related data tabulations, and performing data transformation operations consistently across the collection of data in the database. The relational database paradigm provides extensive flexibility in defining structures of related tabular data, *i.e.*, data arranged in "rows" each comprising one or more "columns" (fields) of data. However, a relational database *per se* provides only the organizational and internal data manipulation aspects of a data-driven system. Another necessary aspect for using a relational database involves providing a framework for a user interface (UI), to allow users to create (enter, add), retrieve (view, search), update (edit), and delete (or hide or suppress the display of) data.

10.   Prior to the Asserted Patents, there was a recurring practical problem in implementing data-driven systems with relational databases, in that, in the prior practice, the UI routines had to be written and adjusted by hand, on a per-table basis, to reflect the underlying database structure, as well as any changes that might be made to that structure.

11.   The Asserted Patents represented a major advance in technology, by providing an automated process that would first scan the structure of the entire database, and then, based on what was learned from that scan, and without requiring further human per-table input or adjustment, construct a complete working user application for working with the relational database, which supported all usual modes of interacting with the database, observed and enforced cross-table relationships defined within the database, and preserved the data and referential integrity of the database data and table structure as changes were made to the data through the generated UI.

12.   Plaintiff alleges that Monday.com has infringed the asserted patents through its provision of data processing services, as set forth in detail herein.

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Monday.com's Services

13.   Monday.com sells work management, sales/customer relationship management (CRM) and development/product team services (the "Services") over the internet, through facilities operated by Monday.com and made accessible by it to the public through Monday.com's website at the internet address monday.com. The Services are widely used throughout the world, including in the U.S. and this District. Monday.com users use the Services through various devices, such as desktop computers, tablets, smartphones, and the like, all incorporating computer processors. Such user devices are generally referred to herein, regardless of their specific hardware embodiments or form factors, as "user computers" or "user systems."

14.   The Services organize and present user data as relational databases. These databases (referred to herein as "user databases"), and their constituent data in tabular form, are made accessible to and manageable by the end users through web-based applications designed, managed, and deployed by Monday.com.

15.   Monday.com presents data to end users in the form of what it calls "boards," for example, the following board representing a collection of "Projects":

According to Monday.com literature, including Monday.com patents, the term "board" can be

considered synonymous with "table." Such boards constitute the tables of the user databases in the Services.

16.   Monday.com allows users to define an arbitrary number of boards, and to define inter-table relationships between and among the boards. The inter-table relationships a user can create in Monday.com are characteristic of relational databases, including without limitation cross-reference relationships defined by links to and from "key" data fields ("primary" and "foreign" keys) within related user tables (boards). ("Primary" keys are keys which uniquely identify each row in a base table, whereas "foreign" keys are keys from a separate, referencing table that point to corresponding rows in the base table.)

17.   Thus, the Services allow users to "connect" their boards, through board columns that may be used for the purpose of making such connections. The below sample code is from the Monday.com API reference (as in effect during the terms of the Asserted Patents) for "Connect Boards," a type of column that allows items (which may be referred to as instances or rows) from one Monday.com board to link to an item in another board. This sample alters fields in a "connect boards" column via a "mutation" operation (which operates to change data on the server managing the database) – demonstrating that numerical keys are used to identify the items to be connected across the two boards. In this example, the "item_ids" 12345, 23456, and 34567 are primary keys for the rows in one table which are to be linked to the same row (with item_id or primary key 11111) in another table. 11111 thus becomes a foreign key in the "connect_boards2" field for each of rows 12345, 23456, and 34567, such that all three of these rows (from the first table) now "point" to row 11111 (in the second table).

```
mutation {change_multiple_column_values(item_id:11111, board_id:22222,
column_values:
    "{\"connect_boards2\" : {\"item_ids\" : [12345, 23456, 34567]}}") {id}}
```

Source: https://developer.Monday.com/api-reference/docs/connect. *See also*
https://support.monday.com/hc/en-us/articles/360000635139-The-Connect-Boards-Column

18.   More generally, the "mutations" supported by the Services allow end users to

modify the structure of the user tables in a user database by adding, removing, or altering fields,

tables, rows, and/or relationships between data among tables. Monday.com's patent filings, *e.g.*,

International Patent Publication WO2021/099839 ("Monday.com WO Publication") and related

applications, are to the same effect reflecting that, as is characteristic of relational databases, user

changes to boards (*i.e.*, database tables) may include "changes … made to cells, items, columns,

boards, dashboard views, logical rules, or any other data associated with the boards," and that,

"[s]imilarly, when cells are tied together or are mirrored across multiple boards, a change in one

board may cause a cascading change in the tied or mirrored boards or dashboards of the same or

other owners." *Id.* at paragraph 0182.

19.   Monday.com's Services allow users to create user databases by starting from a

template and/or creating and connecting boards, and to add to and/or modify such databases

interactively. The UI presented by Monday.com's web applications could have no advance

knowledge of structural changes that a user may make to any existing database after beginning a

session. Nevertheless, it is observed that the UI will adapt itself dynamically to such changes, as

made by the user, automatically generating an end-user UI that works with the modified database

structure.

20.   As alleged in greater detail below, Monday.com's UIs provide the ability to create,

retrieve, update and delete relational data, along with mechanisms for representing, managing,

and navigating relationships between data records across related database tables. Because these

mechanisms adapt without per-table human coding to structural changes that the user makes to the database, Plaintiff asserts that these interface facilities are generated automatically based on a computerized process provided by Monday.com.

21.   Monday.com provides software, copies of which are kept and maintained on facilities controlled by Monday.com, to orchestrate significant portions of the Services, and for those functions to be carried out under the processor of the user's system. Examination of browser operations when connecting to Monday.com's Services show that when a user connects to the Services, a web server under the control of Monday.com automatically causes a multitude of files comprising that software, including data and executable software (primarily in JavaScript and/or similar languages), to be downloaded to the user system for execution in the user's web browser. (Said downloaded files are herein referred to as the Monday.com Downloaded Software, or "MDS.")

22.   The operations carried out by the MDS include without limitation processing (*e.g.*, deserializing) pre-existing user data transferred in serialized (combined and concatenated) form from a remote Monday.com repository to the user's browser, reconstituting therefrom and managing the user database, and constructing its user interface, while continuously updating the HTML Document Object Model (DOM) to display and operate a UI in the user's browser.

23.   In carrying out said functions, and in particular its construction and management of the UI for the user database, the MDS carries out operations sufficient to establish infringement of the Asserted Patents.

24.   In a letter dated October 31, 2023, which Monday.com has publicly filed in this case as D.I. 26-1, its counsel has in fact already *admitted* that "the claimed functionality occurs on the browser side." While its counsel argued that "front-end" execution of claimed operations

(on the "browser side") exempts Monday.com's Services from infringement, that is not the case, as Monday.com has overlooked patent claims (and other facts) that render the locus of execution of the code immaterial to infringement. Monday.com has thus in fact admitted infringement as alleged herein.

25.   With regard to *where* Monday.com code is executed, the aforementioned Monday.com WO Publication states that "[b]oards (*or the data associated with boards*) may be stored in a local memory on a user device or … may also be stored in a remote repository and may be accessed through a network." *Id.* (emphasis added). This information and the information referred to in paragraphs 14-20 above (which is based on direct observation of screen displays as well as user documentation), together with the admission in Monday.com's counsel's aforementioned letter of October 21, 2023, reflects that (1) Monday.com's software that it downloads to every user operates to carry out the functionality claimed in the Asserted Patents when executed in the user's browser, and (2) that Monday.com's preferred practice has been to employ an architecture that offloads much of its data transformation and display processes to this software, which Monday.com downloads to each user computer, which executes locally in the user's browser—such that the user computer "serializes" and "deserializes" "the data associated with boards," reconstitutes previously stored data in the form of relational database structures on the user computer, and manages the user database (including generating the UI for working with the user database) in accordance with the claims of the Asserted Patents as further alleged herein.

26.   In the alternative, insofar as the Monday.com WO Publication (*e.g.*, at paragraph 0182, describing alternate locations where board data may be maintained) suggests that Monday.com is agnostic to where processing steps are performed, and insofar as Monday.com may have used other arrangements of processing elements at times during the relevant period,

and further insofar as the location of processing is not a necessary condition for infringement of

the Asserted Patents, to the extent Monday.com's software during any of the relevant period

performed the generation of the UI for user database structures on its own hosted facilities (or on

other remote data processing facilities that it controlled), infringement of the Asserted Patents

occurred as well, as will also be addressed herein.

27.   Monday.com thus operated facilities for providing the Services, and made and

deployed the MDS to users, as alleged herein, during the respective terms of the Asserted

Patents, without authorization by Plaintiff, thereby infringing at least one claim of each Asserted

Patent. Plaintiff's disclosure of asserted claims and infringement contentions will be provided in

due course pursuant to the District's Local Patent Rules, and the exemplary claims addressed

herein do not limit Plaintiff's asserted patent claims in this action.

<div align="center">

COUNT I

(DIRECT INFRINGEMENT OF U.S. PATENT NO. 7,885,981)

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28.   Plaintiff realleges and incorporates paragraphs 1-27 above by reference.

29.   As more fully alleged in the paragraphs that follow, Monday.com directly

infringed at least claim 5 of the '981 patent, literally and/or under the doctrine of equivalents,

under 35 U.S.C. § 271(a).

30.   The claim 5 preamble states:

5. A computer-readable storage medium containing a set of instructions for a general purpose computer, for automatically generating an end-user interface for working with the data within a relational database, wherein said relational database comprises a plurality of tables, constraints and relationships in accordance with a data model comprising said tables and their column-complements and datatypes, said constraints, and the relationships across said tables, and wherein said relational database may be of any arbitrary size or complexity, said set of instructions comprising:

Each and every tangible copy of the programs and files comprising the MDS constitutes "[a] computer-readable storage medium containing a set of instructions for a general- purpose computer." As further set forth herein, the instructions recorded in these media operate "for automatically generating an end-user interface for working with the data within a relational database" as recited in claim 5 of the '981 patent.

31.   As described in paragraphs 14-20 above, and as readily observable upon use, the relational database that the UI provided by MDS works with, "comprises a plurality of tables, constraints and relationships in accordance with a data model comprising said tables and their column-complements and datatypes, said constraints, and the relationships across said tables." Further, the user may build out the relational database under the MDS to "any arbitrary size or complexity."
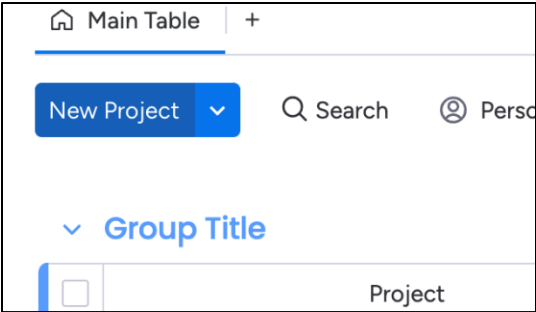
32.   The "set of instructions" provided by the MDS comprise a plurality of routines that meet the limitations of claim 5, literally, and/or under the doctrine of equivalents, as follows:

(a) a routine for providing a user interface paradigm comprising a set of modes for interacting with a given database table, said modes comprising create, retrieve, update and delete, and a corresponding display format for each mode

The instructions of the MDS provide a routine for providing a user interface paradigm comprising a set of modes for interacting with a given database table—those modes comprising create, retrieve, update, and delete—and a corresponding display format for each mode. In particular:

   i.   a "create" mode is reflected in Monday.com screens such as the following:

After clicking on the "New Project" button, a new row appears in the Projects table:

ii.   a "retrieve" mode is reflected in Monday.com screens such as the following:

iii.   an "update" mode is reflected in Monday.com screens such as the following:
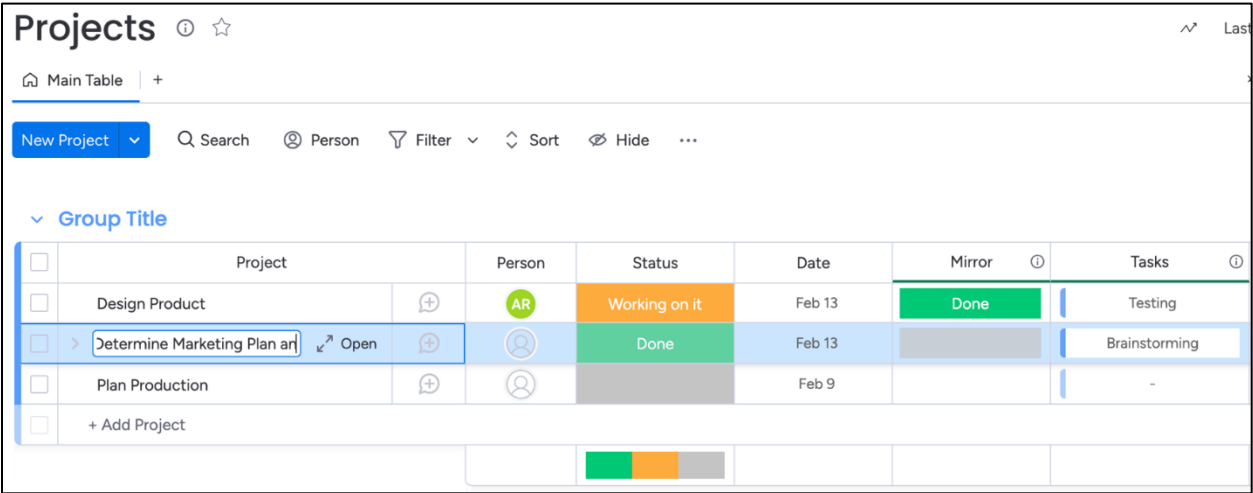
iv.   A "delete" mode is reflected in Monday.com screens such as the following, where after

clicking on a row, the delete option appears at the bottom right of the screen:
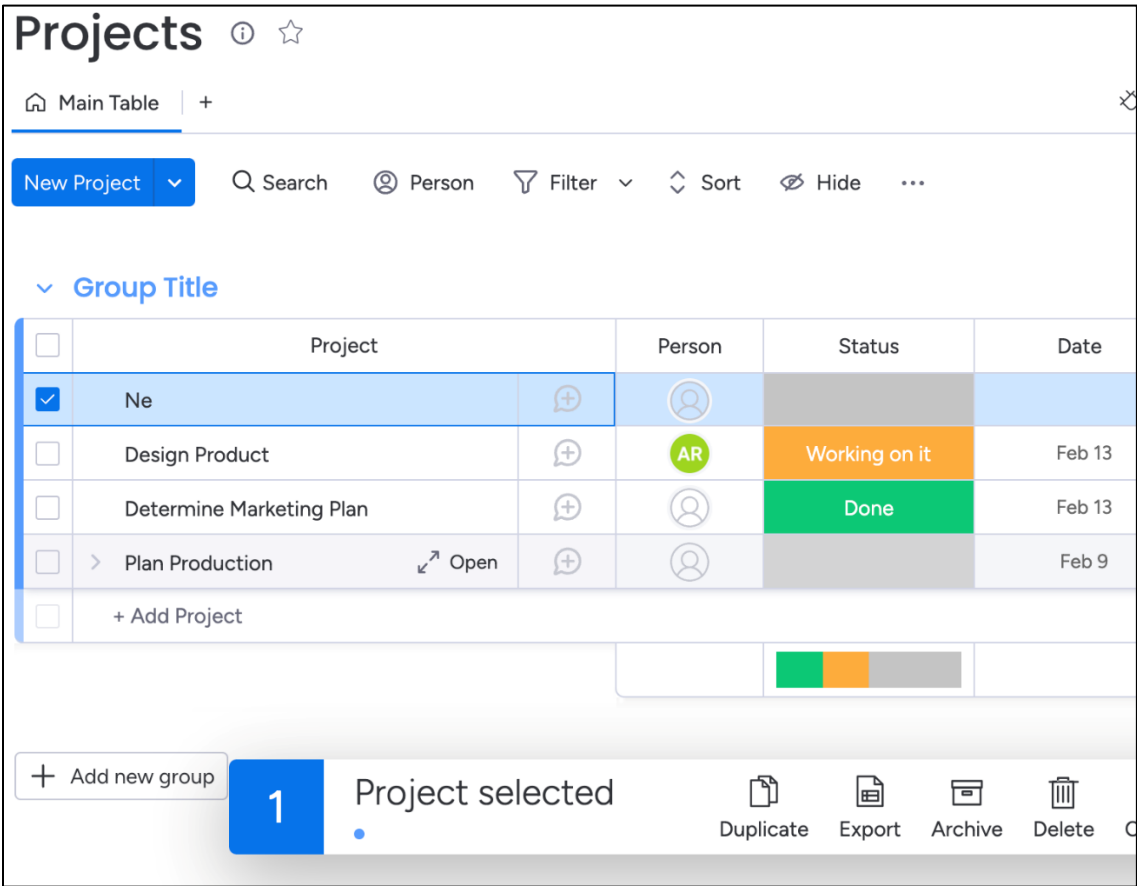
(b) a routine for scanning said database and applying a body of rules to determine the table structures, constraints and relationships of said data model, and for storing representations thereof

The instructions of the MDS provide a routine for scanning the user's database and applying a body of rules to determine the table structures, constraints, and relationships of its data model, and for storing representations thereof. While this routine is internal to the operations of the MDS, Plaintiff alleges that it is reasonable to assert that this routine must take place because the various Monday.com systems all allow the users to alter the table structures, constraints and relationships and the Monday.com UI is observed to dynamically adapt to such changes. For example, in a user-level database having Projects and Tasks tables, a user can add a Connect Boards column (for Tasks) to the Projects table, such that each Project can be assigned one or more Tasks, as shown above in the example "retrieve" display. The Monday.com applications automatically render updated displays after this new column is added, reflecting that the applications re-scan the user database prior to re-rendering the user display screens, thus evidencing performance of this claim routine.

(c) a routine for using said representations to construct a corresponding client application

The MDS uses the representations it has stored pursuant to routine (b) to construct a client application corresponding to the database. This may be seen, for example, where screens of a user-modified database are rendered, as above.

wherein said client application provides a connection to said database

The fact that user changes to the database data are persistent across repeated accesses reflects that the generated client application provides a connection to the database.

provides displays of the table contents of said database for each of said modes in accordance with the display formats of said paradigm

As illustrated with respect to routine (b) above, the client application UI provides displays of the

user-level tables for performing create, retrieve, update, and delete activities, in accordance with

the display formats of the UI paradigm.

> **integrates into each said mode display processes for representing, navigating, and managing said relationships across tables, for selecting among said modes, and for navigating across said tables and interacting in accordance the selected mode with the data in the tables that are reached by said navigation**

Each mode display integrates a number of processes, including processes for representing,

navigating, and managing said relationships across tables; for selecting among the create,

retrieve, update, and delete modes; and for interacting in accordance with the selected mode with

the data in the tables that are reached by said navigation. For example,

"Representing":

The above display integrates a process for representing a relationship across tables, in this

example, by replacing the foreign key for a Project's corresponding Task record with that Task's

name, and also with the blue indicator to the left of each Task field.

"Navigating":
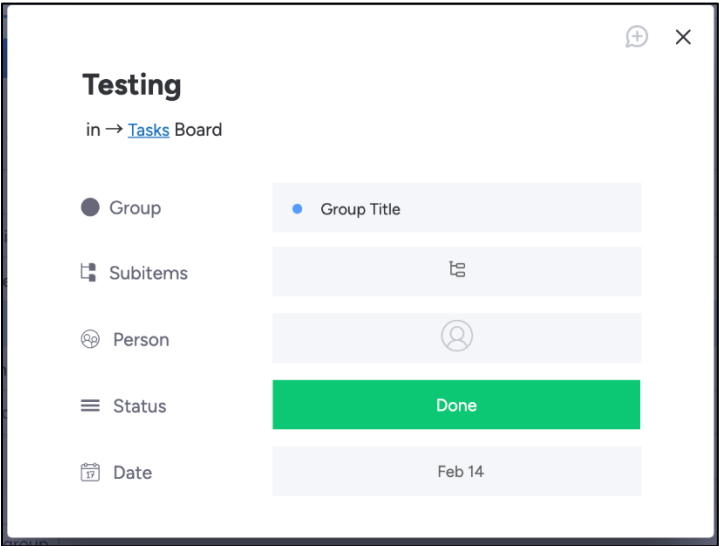
The above display demonstrates "navigating" a relationship, in this example, from a Projects

record to a display of its entire corresponding Tasks record.

"Managing":
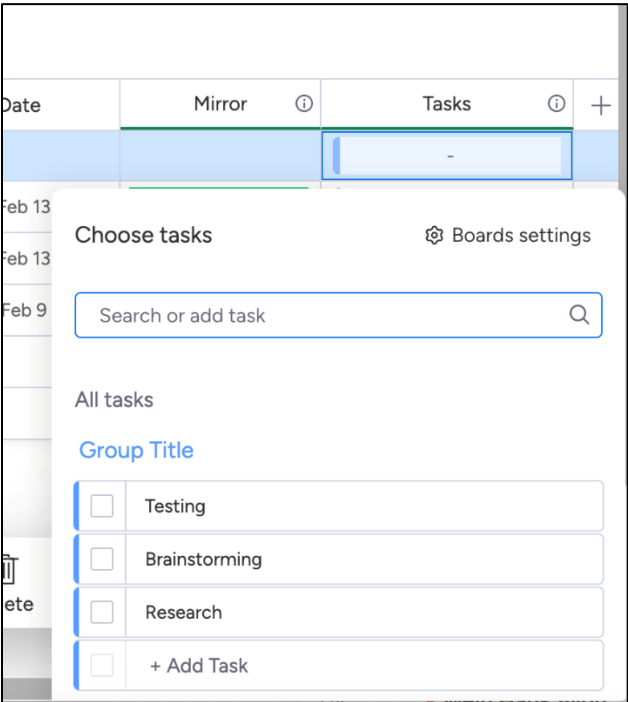
The above display integrates a process for "managing" a relationship across tables, in this example, by providing a list of available Tasks so as to limit permissible inputs for the current Project to only those which are already defined within the corresponding Tasks table.

> **while observing and enforcing relational interdependencies among data across tables**

Monday.com's end-user applications provide all of the above features in a manner that consistently observes and enforces relational interdependencies among data across tables.

33.   Monday.com directly infringed the '981 patent under 35 U.S.C. § 271(a) at least as a result of having created numerous tangible recorded copies of the MDS on the web and/or Content Distribution Network (CDN) servers under its control in the U.S., from which it caused users to download the MDS to make additional copies thereof on each user's computer; using such copies (*i.e.*, the copies on Monday.com's web or CDN servers) to make available a service from which users could download the MDS; and selling such access as part of the Service. Even in the alternative case (as addressed in paragraph 26) that a complete package for performing all claimed routines may not have been downloaded to users via the MDS, the software for performing all the routines nevertheless existed on media that was made and used by Monday.com, thus also constituting direct infringement.

34.   At all times, Plaintiff complied as to the '981 patent with the marking requirement set forth in 35 U.S.C. § 287(a). During the term of the '981 patent Plaintiff did not make, offer for sale, or sell within the United States or import into the United States any product or service covered by the claims of the '981 patent. Plaintiff never had any licensees under the '981 patent during the term thereof. Therefore there was nothing made, offered for sale, sold, or imported that required marking of the '981 patent under 35 U.S.C. § 287(a).

35.   Pursuant to 35 U.S.C. § 284, Plaintiff is entitled to compensation for said infringements, in no event less than a reasonable royalty, for the use made of the '981 patent by Monday.com as herein alleged, together with pre- and post-judgment interest and costs as fixed by the Court.

COUNT II

(DIRECT INFRINGEMENT OF U.S. PATENT NO. 10,025,801)

36.   Plaintiff realleges and incorporates paragraphs 1-35 above by reference.

37.   As more fully alleged in the paragraphs that follow, Monday.com directly infringed at least claim 5 of the '801 patent, literally and/or under the doctrine of equivalents, under 35 U.S.C. § 271(a).

38.   A significant aspect that makes the techniques of the Asserted Patents much more powerful is their improved representation of inter-table relationships. A primary key for a table row (*e.g.*, Employee_ID within the row data for a specific employee) constitutes a unique identifier for that row. In a fully "normalized" database, in accordance with best practices, that primary key should not have any meaning other than as a unique identifier. Because of its lack of application-domain meaning, the primary key will not be useful within the application other than for uniquely identifying the row in which that primary key appears. A major drawback of this prevalent (and sound) practice is that the primary key will most often be a simple number, that, when referenced from a foreign table, will have no meaning to the user. For example, an "Employee" table (in this example, a "referencing" table) may have a cross-reference to another table of existing "Department" entries (the "referenced" table), so as to be able to reflect that a given employee, *"John Doe,"* belongs to the Accounting department. The Accounting department is uniquely defined by its *own* row in the *separate* Department table—including its

own primary key—and is referenced from the Employee table by setting the departmental

foreign key value for each row whose employee works in Accounting to that department's

primary key within the Department table. Note that the primary key in each row of the

Department table will (by best practices) be a *number* (*e.g.*, 12d7394 (a binary number)). What

therefore will be written into the Employee table record for John Doe's department is the *foreign*

key value 12d7394, and **not** the name "Accounting." Thus, if the UI were simply to render the

Employee table "as is," the resulting display would show John Doe's department only as

12d7394, which would be sub-optimal because users would not be expected to know that

12d7394 means the Accounting department, or that 7652301 (for example) means the HR

Department. In the case of John Doe, the user would clearly prefer to see "Accounting" in the

display of this data, rather than the cryptic value 12d7394. The fact that such UI generation

would show only *numbers*—which intentionally carry no intrinsic meaning—and not human-

meaningful information to represent cross-references was a problem that stood in the way of

automatic UI generation for relational databases.

       39.   The '801 patent claims techniques for generating a UI that solves the above-

described problem by augmenting or supplanting (and then displaying) the referenced foreign

key value in a table *with a description derived from one or more values in the referenced table*

row, other than the primary key value. Beyond teaching such supplementation or replacement of

the numeric cross-reference value, the '801 patent also teaches and claims a number of

approaches for *selecting* appropriate alternate referenced table row values (other than the foreign

key itself) from which to derive this description. These approaches take advantage of the fact that

the referenced table is organized as a relational database table (such that each primary key in the

foreign table will uniquely identify all descriptive attributes (column values) associated with the

entity identified by that primary key), the fact that descriptive material may be found in nearby

columns having, *e.g.*, a "character" or "text" datatype, and knowledge of how developers often

structure such tables, in order to select alternate descriptive data from the foreign table that will

be most representative and meaningful to a user. These developments represented a radical

improvement in database UI generation at the time invented and patented by Plaintiff. Plaintiff

alleges that Monday.com infringes the '801 patent's claims to these techniques, throughout the

Services.

      40.   The preamble of claim 5 of the '801 patent recites:

> **5. A non-transitory machine-readable medium, on which there has been recorded machine-readable code for a program executable on a processor, said program comprising routines for displaying, within a user interface operating under control of a processor, an enhanced representation of data from a relational database, the relational database comprising machine-readable data representing a plurality of tables, constraints, and relationships and also operating under control of a processor, wherein the plurality of tables comprises a primary table and a foreign table, wherein each one of the primary table and the foreign table comprises at least one row, and wherein each row comprises a plurality of columns, the routines comprising:**

a "non-transitory machine-readable medium, on which there has been recorded machine-readable

code [as specified in the remainder of the preamble]" is represented herein by the MDS code

made, kept and maintained on servers controlled by Monday.com. Further, per this preamble,

said MDS code is executable on a processor and comprises routines for displaying within the UI

generated by the MDS, an enhanced representation of data from the user database, which

database is as described in this preamble, as outlined above with respect to Count I, and thus may

comprise a primary (referencing) table and a foreign (referenced) table related through a

common key value that serves as both a foreign key in the referencing table, and a primary key

in the referenced table.

41.   When the first (referencing) user-level table in such a Monday.com user database is related to a second (referenced) user-level table thereof through a foreign key, the routines of the MDS, in rendering the first user-level table within the UI, automatically supplant the foreign key for each row in the representation of the first user-level table with a description derived from the data in the related row from the second table, thereby enhancing the representation of the data in the first table by replacing what would have been an unintelligible numeric "pointer" value (without intrinsic meaning) with a more human-friendly description derived from the second table. This functionality may be seen in the following example:

The above example shows a Projects board, displaying rows of a primary table (Projects) that reference rows from a foreign table (Tasks). Monday.com's MDS constructs this representation of data for a row (or multiple rows, as shown) of the Projects table automatically, via machine-generation ("a routine to automatically construct a representation of data from a row of the primary table (primary-table row)"). The actual value stored within the Tasks (FK) column for each record in the Projects table is a numerical record ID representing a primary key (PK) in the Tasks table. The MDS routines identify this foreign key ("a routine to identify a foreign key (FK) value in an FK column in the primary-table row, wherein the FK column references the foreign

table"), and locate the corresponding foreign table row ("a routine to locate a row in the foreign table (foreign-table row) whose primary key (PK) value matches the identified FK value"). The MDS code also "select[s] a value from the foreign-table row other than the PK value." This is the actual value displayed above in the "Tasks" field, where "Testing" is shown for the first displayed row and "Brainstorming" is shown for the second displayed row. These string values, "Testing" and "Brainstorming," are the selected values from the corresponding rows of the Tasks table.

42.   The MDS routines further derive the data and description for use in the display of foreign table references within primary user-level tables within the Monday.com UI, by at least one of the mechanisms specified in at least claim 5 of the '801 patent, *i.e.*, based on at least one of "column name," "column position," etc., of "the column in the foreign table that contains the selected value," as enumerated in claim 5, use the result to supplant the FK value with the derived description in constructing the representation, and display the representation so constructed in the generated UI.

43.   Monday.com directly infringed the '801 patent under 35 U.S.C. § 271(a) at least as a result of having created numerous tangible recorded copies of the MDS on the web and/or CDN servers under its control in the U.S., from which it caused users to download the MDS to make additional copies thereof on each user's computer; using such copies (*i.e.*, the copies on Monday.com's web or CDN servers) to make available a service from which users could download the MDS, and selling such access as part of the Service. Even in the alternative case (as addressed in paragraph 26) that a complete package for performing all claimed routines may not have been downloaded to users via the MDS, the software for performing all the routines

nevertheless existed on media that was made and used by Monday.com, thus also constituting direct infringement.

44.   At all times, Plaintiff complied as to the '801 patent with the marking requirement set forth in 35 U.S.C. § 287(a). During the term of the '801 patent, Plaintiff did not make, offer for sale, or sell within the United States or import into the United States any product or service covered by the claims of the '801 patent. Plaintiff never had any licensees under the '801 patent during the term thereof. Therefore there was nothing made, offered for sale, sold, or imported, that required marking of the '801 patent under 35 U.S.C. § 287(a).

45.   Pursuant to 35 U.S.C. § 284, Plaintiff is entitled to compensation for said infringements, in no event less than a reasonable royalty, for the use made of the '801 patent by Monday.com as herein alleged, together with pre- and post-judgment interest and costs as fixed by the court.

COUNT III

(DIRECT INFRINGEMENT OF U.S. PATENT NO. 10,977,220)

46.   Plaintiff realleges and incorporates paragraphs 1-45 above by reference.

47.   As more fully alleged in the paragraphs that follow, Monday.com directly infringed at least claim 14 of the '220 patent, literally and/or under the doctrine of equivalents, under 35 U.S.C. § 271(a).

48.   The claim 14 preamble states:

14. A non-transitory computer-readable storage medium containing a set of instructions for a general purpose computer, for automatically generating a user interface for working with the data within a relational database, wherein the database is described by a data model comprising a plurality of tables, constraints, and relationships, said set of instructions comprising:

Each and every tangible copy of the programs and files comprising the MDS constitutes "[a] non-transitory computer-readable storage medium containing a set of instructions for a general

purpose computer." As further set forth herein, the instructions recorded in these media operate "for automatically generating an end-user interface for working with the data within a relational database" as recited in claim 14 of the '220 patent.

49. As described in paragraphs 14-20 above, the relational database with which the UI provided by MDS works "is described by a data model comprising a plurality of tables, constraints and relationships.

50. The "set of instructions" provided by the MDS comprise a plurality of routines that meet the limitations of claim 14, literally, and/or under the doctrine of equivalents, as follows:

(a) a routine for scanning the database to determine the tables, constraints, and relationships of the data model

The instructions of the MDS provide a routine for scanning the user's database to determine the table structures, constraints, and relationships of its data model. While this routine is internal to the operations of the MDS, Plaintiff alleges that it is reasonable to assert that this routine must exist because the various Monday.com systems all allow the users to alter the table structures, constraints and relationships and the Monday.com UI is observed to dynamically adapt to such changes. For example, in a user-level database having Projects and Tasks tables, a user can add a Connect Boards column (for Tasks) to the Projects table, such that each Project can be assigned one or more Tasks, as shown above in the example "retrieve" display. The Monday.com applications automatically render updated displays after this new column is added, reflecting that the applications re-scan the user database prior to re-rendering the user display screens, thus evidencing performance of this claim routine.

(b) a routine for creating machine representations of the tables, constraints, and relationships

The MDS creates machine representations of the tables, constraints, and relationships that are

scanned in routine (a), above. While this routine is internal to the MDS, Plaintiff alleges that it is

reasonable to assert that this routine is present because the MDS allows the user to alter the table

structures, constraints and relationships and the Monday.com UI is observed to dynamically

adapt to such changes, which Plaintiff believes would be implemented with the least complexity

by creating machine representations of the tables, constraints, and relationships.

(c) a routine for constructing from the representations a corresponding client application

The MDS uses the representations from routine (b) to construct a client application

corresponding to the database structure. This may be seen, for example, where screens of a user-

modified database are rendered.

[the client application] provides:

(i) a connection to the database

The client application from routine (c) provides a connection to the database. This may be seen,

for example, where changes to data through user interaction persist across repeated accesses.

(ii) displays for creating, retrieving, updating, and deleting data within one or more of the tables

These displays are provided by the MDS as set forth in paragraph 32, routine (a) above.

(iii) mechanisms for representing, managing, and navigating the relationships between data records across related tables

These displays are provided by the MDS as set forth in paragraph 32, routine (c), above.

wherein constructing the corresponding client application does not require any incremental human intervention on a per table basis.

By observation, nothing in the construction of the corresponding client application requires human intervention on a per-table basis. The construction is done by the MDS regardless of the number of tables.

51.   Monday.com directly infringed the '220 patent under 35 U.S.C. § 271(a) at least as a result of having created numerous tangible recorded copies of the MDS on the web and/or CDN servers under its control in the U.S., from which it caused users to download the MDS to make additional copies thereof on each user's computer; using such copies (*i.e.*, the copies on Monday.com's web or CDN servers) to make available a service from which users could download the MDS; and selling such access as part of the Service. Even in the alternative case (as addressed in paragraph 26) that a complete package for performing all claimed routines may not have been downloaded to users via the MDS, the software for performing all the routines nevertheless existed on media that was made and used by Monday.com, thus also constituting direct infringement.

52.   At all times, Plaintiff complied as to the '220 patent with the marking requirement set forth in 35 U.S.C. § 287(a). During the term of the '220 patent, Plaintiff did not make, offer for sale, or sell within the United States or import into the United States any product or service covered by the claims of the '220 patent. Plaintiff had no licensees under the '220 patent until July 7, 2021, when Plaintiff licensed Salesforce.com Inc. under the '220 patent (and its only licensee thereunder), under terms designated as confidential. Plaintiff does not believe that from July 7, 2021 to the end of the term of the '220 patent (February 5, 2022) Salesforce.com Inc. made, sold, offered for sale, or imported any patented articles under the '220 patent, in that, to the best of Plaintiff's knowledge, Salesforce.com's business relative to the subject matter of the '220 patent was to provide "software as a service," which entailed performing methods to

provide a service over the internet, and not the sale of patented articles. Therefore there were no articles made, sold, offered for sale, or imported, that required marking of the '220 patent under 35 U.S.C. § 287(a).

53.   Pursuant to 35 U.S.C. § 284, Plaintiff is entitled to compensation for said infringements, in no event less than a reasonable royalty, for the use made of the '220 patent by Monday.com as herein alleged, together with pre- and post-judgment interest and costs as fixed by the Court.

PRAYER FOR RELIEF

Plaintiff requests that the Court enter judgment against Monday.com as follows:

(A) that Monday.com has infringed the Asserted Patents;

(B) awarding Plaintiff its damages suffered as a result of Monday.com's infringement of the Asserted Patents pursuant to 35 U.S.C. § 284;

(C) awarding Plaintiff its costs, attorneys' fees, expenses, and interest (including without limitation pre-judgment interest); and

(D) granting Plaintiff such other and further relief as the Court may deem just and proper.

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<u>DEMAND FOR JURY TRIAL</u>

Plaintiff hereby demands trial by jury on all issues so triable pursuant to Federal Rule of

Civil Procedure 38.

Dated: February 6, 2024   /s Ronald Abramson
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